What is claimed is:

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1. Process for the production of mycophenolate mofetil [mycophenolic acid 2-(4-morpholinyl)ethyl ester] of formula

whereby a reactive derivative of mycophenolic acid is produced in an inert solvent and is reacted with 4-(2-hydroxyethyl)morpholine, and the resulting mycophenolate mofetil is isolated from the reaction mixture, characterised in that

- I) 4-(2-hydroxyethyl)morpholine is added under controlled conditions to the solution of the reactive derivative of mycophenolic acid, whereby the reaction takes place under acidic reaction conditions, and
- II) isolation of mycophenolate mofetil is effected by forming an acid addition salt and subsequently releasing the free base.
- 2. Process according to claim 1, characterised in that 4-(2-hydroxyethyl)morpholine is added to the solution of the reactive derivative of mycophenolic acid.
- 3. Process according to claim 1 or 2, characterised in that it contains the following process steps:
 - a) activation of mycophenolic acid by forming a reactive derivative
 - reacting the reactive derivative of mycophenolic acid with 4-(2hydroxyethyl)morpholine by esterifying to mycophenolate mofetil under acidic reaction conditions,
 - c) isolating mycophenolate mofetil through the formation of an acid addition salt, and
 - d) releasing the free base of mycophenolate mofetil from the acid addition salt.
- Process according to one of claims 1 to 3, characterised in that the reactive derivative of mycophenolic acid is an activated carboxylic acid derivative.

- 5. Process according to one of claims 1 to 4, characterised in that the activated carboxylic acid derivative of mycophenolic acid is an acid halide.
- 6. Process according to one of claims 1 to 5, characterised in that the acid halide is an acid chloride.
 - 7. Process according to one of claims 1 to 6, characterised in that activation of mycophenolic acid (process step a) is effected according to Vilsmeier technology.
- Process according to claim 7, characterised in that the Vilsmeier reagent employed is the combination of N,N-dimethylformamide and oxalyl chloride.
- Process according to one of claims 1 to 8, characterised in that the inert solvent, in which the activation reaction (process step a) and the esterification reaction (process step b) is carried out, is an acetic acid (C₁-C₄) alkyl ester or a halogenated hydrocarbon, optionally in the presence of a cosolvent.
 - 10. Process according to claim 9, characterised in that the inert solvent is ethyl acetate or dichloromethane, optionally in the presence of a cosolvent.
 - 11. Process according to claim 9 or 10, characterised in that the cosolvent is an organic amide.
- Process according to one of claims 1 to 11, characterised in that the acid addition salt of mycophenolate mofetil is the oxalate or the hydrochloride of mycophenolate mofetil.
 - 13. Process according to one of claims 1 to 12, characterised in that the formation of mycophenolate mofetil oxalate is effected from ethyl acetate or dichloromethane, optionally in the presence of a cosolvent from the group of ketones, (C₁-C₄)-alcohols or mixtures of the two.
 - 14. Process according to one of claims 1 to 12, characterised in that the formation of mycophenolate mofetil hydrochloride is effected in ethyl acetate, optionally in the presence of an organic amide.

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- 15. Use of mycophenolate mofetil oxalate as an intermediate in the production of mycophenolate mofetil or its pharmaceutically acceptable salts by the process according to one of claims 1 to 14.
- 5 16. Mycophenolate mofetil oxalate in crystalline form and its hydrates and solvates.